



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,031	08/16/2006	David Watt Stevenson	031749/301402	7840

826 7590 08/03/2010

ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

PHANTANA ANGKOO, DAVID

ART UNIT

PAPER NUMBER

2175

MAIL DATE

DELIVERY MODE

08/03/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/554,031

**Applicant(s)**

STEVENSON, DAVID WATT

**Examiner**

David Phantana-angkool

**Art Unit**

2175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 July 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 74-78 and 80-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 74-78 and 80-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This application has been reassigned to Examiner David Phantana-angkool.  
**This action is made Final.**
2. This action is responsive to amendments filed on July 9<sup>th</sup>, 2010.
3. Claims 73, 75-78, and 80-82 are pending in the case. Claims 73 and 78 are the independent claims.
4. Applicants amended claims 73 and 78.
5. Applicants canceled claims 83-105.

***Claim Rejections - 35 USC § 103***

6. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 73, 75-78, and 80-82 and 101-104 are rejected under 35 U.S.C. 103(a) as being unpatentable by Banerjee et al., US 6,983,273 in view of Beerud Sheth, "A Learning Approach to Personalized Information Filtering" (hereinafter Sheth) and in further view of Herz, US# 6,020,883. As for independent claim 73:**

Banerjee discloses the claimed aspect of *a method for identifying a measure of similarity between activities of a plurality of parties using groups of information associated with, and representative of those parties on the world wide web or in other information stores, the method comprising* in FIG. 7 and FIG. 8, wherein a results page shown on a portion of a computer display (79), in which a search for sites regarding child health care was performed and five results items or "hits" (71- 75) are given, each with a

Art Unit: 2175

short summary or the first few words for the linked site page, a relevance score, and a URL. As per typical search engine results, these results are sorted by degree of relevance. (Banerjee, Column 9, lines 24-30).

Banerjee discloses the claimed aspect of *analyzing groups of information comprising text data of web sites which are representative of the activities of each party*, wherein a web site is added to the engine's categories and keyword lists as suggested and as determined by analysis of the content of the submitted web site (e.g. word frequency analysis, hyper text header tags, etc. Banerjee shows indexing engine which have indexing operation, see Para. 1: 46-59) and measure of important is determined by word frequency analysis or hyper text header tags analysis. (Banerjee, Column 1, lines 53-57).

Banerjee discloses the claimed aspect of *prior user involvement deriving a content profile for the information group of each party without prior knowledge of the content of the information group, and comparing the profiles directly to each other without reference to any external information source that pre-classifies and groups similar information groups to identify a degree of similarity between parties* in FIG. 7 and FIG. 8, wherein a relevance percentage is determined based on counting the number of keywords common to each hit list. Banerjee further shows that the results are sorted by degree of relevance and that no sorting or filtering preferences have been set or specified (9:24-33). Furthermore Banerjee disclosed that each site server provides content and is indexed by the search engine server (6:59-67). Banerjee further shows the process of associating characteristic factors with linked sites is presented in Figure 4. The ratings for the linked site and potentially for any sites from which the linked site republishes information are obtained from one or more co-opted servers. These ratings are dynamically updated (8:1-36), and therefore the content profile occurs prior to user involvement.

Banerjee does not shows *prior user involvement deriving a content profile for the information group of each party without prior knowledge of the content of the information group, and comparing the profiles directly to each other without reference to any external information source that pre-classifies and groups similar information groups to identify a degree of similarity between parties*. However in the same field of generating and determining a profile, Sheth teaches the above limitation in Sheth 3.4, Crossover, 3.4.1. Sheth discloses a crossover operator which takes two parents, P1 and P2 and produces two offsprings (P3 and P4) and each offspring inherits some attributes from the parents.

Art Unit: 2175

### 3.4.1 Crossover

For the purposes of this section, assume that the fields in every profile are identically ordered. The exact order is not important, as long as it is the same in all profiles. So, for example, in every profile, the newsgroup field is the first, the keyword field second, and so on.

Let  $P_1$  and  $P_2$  be the parent profiles:

$$P_1 = \{(f_1^p, W(f_1^p))\}$$

$$P_2 = \{(f_2^p, W(f_2^p))\}$$

The crossover operator takes two parents and produces two offsprings. Each offspring inherits some attributes from one parent and the rest from the other. A *two-point crossover* is used by the crossover operator. Two points are randomly selected in the list of fields. All the fields lying between the two points are exchanged between the two parents to create two new offsprings. Since the fields in both the parents are in the same order, each offspring will have one field of each kind. The fitness of the offsprings is set to a default initial value. Formally:

$$P_1 \otimes P_2 \Rightarrow P_3, P_4 \quad (3.10)$$

$$P_3 = \{(g_1^p, W(g_1^p))\}$$

$$P_4 = \{(g_2^p, W(g_2^p))\} \quad (3.11)$$

Thus Sheth teaches *prior user involvement deriving a content profile for the information group of each party without prior knowledge of the content of the information group, and comparing the profiles directly to each other without reference to any external information source that pre-classifies and groups similar information groups to identify a degree of similarity between parties*. Accordingly it would have been obvious to a skilled artisan at the time of the invention was made to modify the method of Banerjee to incorporate the Crossover operator and comparing profiles as taught by Sheth, thus allowing the system to compare profiles directly to teach other without reference to an external information source (Sheth, 3.4.1 and 4.2.6)

Banerjee does not specifically show *providing information about the degree of similarity between parties in response to user input which identifies one of the parties or a representative website of one of the parties, without requiring a user to enter a keyword search or provide other advance knowledge of a subject of the information groups*. In the same field of invention Herz shows *providing information about the degree of similarity between parties in response to user input which identifies one of the parties or a representative website of one of the parties, without requiring a user to provide advance knowledge of a*

Art Unit: 2175

*subject of the information groups* in Col. 4, lines 35-62. Both Banerjee and Herz are analogous art.

Accordingly it would have been obvious to a skilled artisan to modify the method of Banerjee and Sheth to incorporate the determining the degree of similarity between parties in response to user input without requiring a user to enter a keyword as taught by Herz, thus allowing the system to match a closely related data set that matches the user objected preferences (4:30-34).

For Additionally information, also Dedhia, in US 20030212669 (included previously in 892) discloses the claimed aspect of comparing comprises counting the number of topics common to the profiles of each party in FIG. 6, wherein all of the filtered relevant product catalog descriptions are ranked based on the frequency and importance of these terms with respect to its category (6.3). Applicant should duly note in such a ranking system counting is used to determine the frequency.

Banerjee discloses the claimed aspect of wherein deriving each content profile comprises: calculating a frequency of occurrence of word and phrase topics in the group, allocating a measure of importance to each topic in the group which is proportional to the topic frequency of occurrence in the group, wherein a web site is added to the engine's categories and keyword lists as suggested and as determined by analysis of the content of the submitted web site (e.g. word frequency analysis, hyper text header tags, etc.) and measure of important is determined by word frequency analysis or hyper text header tags analysis. (Banerjee, Column 1, lines 53-57). Furthermore, important keywords determination is based on word frequency (Banerjee, Column 1, lines 53-57) and in FIG.4, the process (40) of associating characteristic factors with linked sites is presented. When a search engine receives (41) an initial submission for indexing content from a linked site (or upon re-indexing of a previously indexed linked site), the actual content of the linked site is analyzed (42) by retrieving one or more pages and web objects from the linked site server (36). Well-known processes such as word statistical analysis can be used to determine the keywords to be indexed to the site. (Banerjee, Column 8, lines 1-8). Furthermore, in FIG. 5, the logical process (50) during operation in cooperation with a search process is shown. When a set of search criteria is received (51) from a client computer (32) such as a set of keywords, phrases, or QBE example, the search engines general index (34) is searched (52). The ratings index (34') is accessed for each results item (e.g. for each "hit"), and a results page is created with the summaries and

Art Unit: 2175

one or more associated characteristics icons or symbols for each result item. Applicant should duly note that the unrelated topics are not shown as hits.

Banerjee discloses the claimed aspect of comparing comprises: using the measure to generate a topic profile for each group that includes a plurality of topic identifiers and an indication of the importance of each of the topics identified to the group; defining a list of related topics which are related to one or more of said topic identifiers, in FIG. 7 and FIG. 8, wherein a relevance percentage is determined based on counting the number of keywords common to each hit list and comparison. Furthermore, also Dedhia, in US 20030212669 discloses the claimed aspect of comparing comprises counting the number of topics common to the profiles of each party in FIG. 6, wherein all of the filtered relevant product catalog descriptions are ranked based on the frequency and importance of these terms with respect to its category (6.3). Applicant should duly note in such a ranking system counting is used to determine the frequency.

Banerjee discloses the claimed aspect of discarding topics in the topic profile which do not appear in the list of related topics; and wherein the list of related topics is derived without requiring the user to provide advance knowledge of the subject of the group (Banerjee, Column 1, lines 53-57) and in FIG.4, the process (40) of associating characteristic factors with linked sites is presented. When a search engine receives (41) an initial submission for indexing content from a linked site (or upon re-indexing of a previously indexed linked site), the actual content of the linked site is analyzed (42) by retrieving one or more pages and web objects from the linked site server (36). Well-known processes such as word statistical analysis can be used to determine the keywords to be indexed to the site. (Banerjee, Column 8, lines 1-8). Furthermore, in FIG. 5, the logical process (50) during operation in cooperation with a search process is shown. When a set of search criteria is received (51) from a client computer (32) such as a set of keywords, phrases, or QBE example, the search engines general index (34) is searched (52). The ratings index (34') is accessed for each results item (e.g. for each "hit"), and a results page is created with the summaries and one or more associated characteristics icons or symbols for each result item. Applicant should note that the unrelated topics are not shown as hits.

Even if Banerjee is not clear in teaching the limitations: discarding topics in the topic profile which do not appear in the list of related topics; and wherein the list of related topics is derived without requiring the user to provide advance knowledge of the subject of the group, it is noted that Banerjee along with Sheth teaches the Crossover operator which produce offsprings that are related, thus the Crossover operator discarded topics in the topic profile which do not appear in the list of related topics.

**As for dependent claim 75:**

Banerjee discloses the claimed aspect of *determining the list of related topics utilizes a thesaurus*(association with predefined symbols, Abstract) *to provide a plurality of related topic lists*, wherein a web site is added to the engine's categories and keyword lists as suggested and as determined by analysis of the content of the submitted web site (e.g. word frequency analysis, hyper text header tags, etc.) and measure of important is determined by word frequency analysis or hyper text header tags analysis. (Banerjee, Column 1, lines 53-57).

Banerjee discloses the claimed aspect of *each list related to a single topic in the topic profile, and aggregates the lists to form a final list of related topics for use in discarding topics in the topic profile* in FIG.4, the process (40) of associating characteristic factors with linked sites is presented. When a search engine receives (41) an initial submission for indexing content from a linked site (or upon re-indexing of a previously indexed linked site), the actual content of the linked site is analyzed (42) by retrieving one or more pages and web objects from the linked site server (36). Well known processes such as word statistical analysis can be used to determine the keywords to be indexed to the site. (Banerjee, Column 8, lines 1-8). Furthermore, in FIG. 5, the logical process (50) during operation in cooperation with a search process is shown. When a set of search criteria is received (51) from a client computer (32) such as a set of keywords, phrases, or QBE example, the search engines general index (34) is searched (52). The ratings index (34') is accessed for each results item (e.g. for each "hit"), and a results page is created with the summaries and one or more associated characteristics icons or symbols for each result item. Applicant should duly note that the unrelated topics are not shown as hits.



Art Unit: 2175

**As for dependent claim 76:**

Claim 76 contains similar substantial subject matter as claimed in claim 74, and is respectfully rejected along the same rationale.

**As for dependent claim 77:**

Banerjee discloses the claimed aspect of group of electronic document text comprises pages of a web site in FIG. 7 and FIG. 8, wherein a listing of web sites are illustrated. Banerjee discloses the claimed aspect of downloading each page of the site in order to do the step of analyzing in FIG.4, wherein when a search engine receives (41) an initial submission for indexing content from a linked site (or upon re-indexing of a previously indexed linked site), the actual content of the linked site is analyzed (42) by retrieving one or more pages and web objects from the linked site server (36). Well known processes such as word statistical analysis can be used to determine the keywords to be indexed to the site. Keyword lists may be used to categorize the content of the site. (Banerjee, Column 8, lines 3-10).

**As for claims 78, 80-82:**

Independent claim 78 and dependent claims 80-82 reflect the system comprising of computer readable instructions for performing the step of method independent claim 73 and dependent claims 75-77 and are respectfully rejected along the same rationale.

***Response to Arguments***

8. Applicant's arguments filed 07/09/2010 have been fully considered but they are not persuasive.
9. Applicants amended claim 73 to recite creating each content profile based on measuring the frequency or" occurrence of topics and refining the profile by removing words which are not related to any other words in the profile (Applicants' Remarks, Pg. 5).

It is noted that the above limitations are taught by Banerjee, Sheth and Herz. See Office Action, Pg. 6. Banerjee discloses the claimed aspect of discarding topics in the topic profile which do not appear in the list of related topics; and wherein the list of related topics is derived without requiring the user to provide advance knowledge of the subject of the group (Banerjee, Column 1, lines 53-57) and in FIG.4, the process (40) of associating characteristic factors with linked sites is presented. When a search engine

Art Unit: 2175

receives (41) an initial submission for indexing content from a linked site (or upon re-indexing of a previously indexed linked site), the actual content of the linked site is analyzed (42) by retrieving one or more pages and web objects from the linked site server (36). Well-known processes such as word statistical analysis can be used to determine the keywords to be indexed to the site. (Banerjee, Column 8, lines 1-8). Furthermore, in FIG. 5, the logical process (50) during operation in cooperation with a search process is shown. When a set of search criteria is received (51) from a client computer (32) such as a set of keywords, phrases, or QBE example, the search engines general index (34) is searched (52). The ratings index (34') is accessed for each results item (e.g. for each "hit"), and a results page is created with the summaries and one or more associated characteristics icons or symbols for each result item.

In addition, even if Banerjee is not clear in teaching the limitations: discarding topics in the topic profile which do not appear in the list of related topics; and wherein the list of related topics is derived without requiring the user to provide advance knowledge of the subject of the group, it is noted that Banerjee along with Sheth teaches the Crossover operator which produce offsprings that are related, thus the Crossover operator discarded topics in the topic profile which do not appear in the list of related topics.

### Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2175

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Phantana-angkool whose telephone number is 571-272-2673. The examiner can normally be reached on M-F, 9:00-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on 571-272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP  
/David Phantana-angkool/  
Examiner, Art Unit 2175

/William L. Bashore/  
Supervisory Patent Examiner, Art Unit 2175